



First Graduating Class of the State Manual Training School in Ellendale (M.T.S., 1901):
left to right, Clockwise from bottom: Minnie
A. Fait, Flora B. Millham, Ina E. Randall,
Professor Albert E. Dunphy



Industrial Training in the Schools.



Oration of Miss Ina E. Randall Delivered
Upon Graduating from the State
Manual Training School at
Ellendale, N. D., on
May 17, 1901



Industrial Training in the Schools.

The following is the oration of Miss Ina Randall on the above subject, delivered upon graduating from the State Manual Training School at Ellendale N. D., on May 17, 1901:

Since the purpose of education is the harmonious development of all the powers of man, it follows that a system of education which fails to accomplish this end is one-sided, incomplete and unscientific. A training that can attain this result is one that unfolds the mental, moral and physical faculties of man simultaneously and in so doing accomplishes an ideal and symmetrical education. It is this kind of instruction that a manual training school offers. The school that elevates labor and honors the laborer, the school that trains man in his natural elements, the school that not only instructs but educates, not only teaches how to think but how to do—the secret of the progress of civilization.

The value of industrial training as a factor in general mental development, deserves emphasis on account of a widespread notion that such training is of importance only to those who intend to follow mechanical pursuits. To say that industrial training is of value only to prospective artisans, is as fallacious as to say that physical culture is of value only to would be athletes.

When manual training asks for admission in the regular school course, it does not say, "Discard your books and use my tools," but it does say, "Book-learning is not enough, let me add tool-learning; let the hand execute with my tools what the brain informed by your books, directs." To neglect the education of the hand, is to lower respect for manual labor, and contempt for manual labor makes a nation recede from civilization. Manual labor is the foundation of a nation's prosperity and the labor class stands in the foreground as the substantial element of its population,

for it is labor, not territory, that is its source of wealth.

Yet, do not think it means the exclusive cultivation of the hand, it has sprung from a purpose more profound—the recognition of the growing demand for a complete man, a man who possesses not only a well-informed mind, but one who sees with a true eye, executes with a skilled hand, thinks clearly, reasons logically, and acts wisely, requirements which enable him to follow successfully any vocation in life. To the white man, industrial training is the means of raising him above being a mere machine; to the negro it is emancipation from serfdom.

The object of work-shop practice, as a part of education, is not to teach a boy a trade, nor is it to produce the polished article of furniture; it is to teach the boy how to play the game of life successfully, and it aims to produce the finished living man. And, although the carpenter's bench and turner's lathe are employed as instruments of such training, it is not to create carpenters and joiners, but to familiarize the pupil with common substances and their physical properties, to quicken his perceptive faculties, to make him a doer instead of a mere listener and to teach him how to build character as well as to build houses.

You may know the law of the Pulley, but if you cannot apply it, it avails you nothing; you may be able to repeat the laws of Newton—they are valueless unless you can put them in use; you may quote the philosophy of Bacon but if you cannot apply his methods, it shows that your education has cultivated your memory and allowed your reason to slumber. It has been the misfortune of the old education to memorize words and not to assimilate ideas. If to memorize, is learning to reason then the only requisite to become a Cicero is to memorize the rules of logic and rhetoric. Which shall we do? Shall we train eleven millions of school children simply to memorize the facts which others have

discovered, to get only what some one else has digested, to toil for naught; or, shall we train them to think, observe, compare, invent and classify for themselves? If the age wants a system of education that allows no faculty of the mind to lie dormant, if it wants a broad and impartial training, if it wants living men, with skilled hands as well as cultured minds for its citizens, then it is industrial education that supplies its demands. People learn to think, by thinking, they are useful by being taught useful things—dependent upon their own resources and not allowing text-books and encyclopedias to solve their problems.

Those who think that industrial training fails to cultivate the aesthetic faculties and that industry and art are not closely related, listen to the words of Ruskin for he says, "Life Without Industry is Guilt and Industry Without Art is Brutality." By "Art," he does not mean mere skill of the hand, nor amusement or trade, but a medium through which the mind may receive and give impressions, appreciate the great works of the past and aid in producing the great works of the future. The arts are so closely interwoven with the industrial pursuits that a decline of one would impoverish the other. You cannot acquaint yourself with manual training until you can read the language of drawing. It is a drawing that tells the machinist how to construct the locomotive, and it is a drawing that directs every blow of the architect's hammer. Art may be represented by the carpenter with his square and saw, by the blacksmith with his hammer and anvil, as worthily as it is represented by the painter with his brush, or the sculptor with his chisel. So it is, that the useful arts are as fine as the fine arts. It is conceded by all that the fine arts stimulate a feeling of love for the good, the true and beautiful in nature, but it is doubted by some whether the fine arts are manual training, but they are manual

training for any activity that employs the hand as its executor, is included in that name. As the poet paints his thoughts and ideals in words and verse, so the artist paints his in form and color, and the sculptor chisels his in marble. Drawing is the one universal language. A knowledge of the mechanical branch, enables the artisan to look at a drawing of the steam engine, and while the untrained eye would see nothing but meaningless lines and angles, he would see in it that wonderful machine itself; the lines slide into the background, and the engine stands in bold relief before him. A knowledge of another branch, enables the artist to take a canvas, of little value in itself, and upon its surface reveal to us a new world endowed with the beauties of nature, making life seem large and beautiful and the meaner portion of our nature shrink from sight.

In looking at the beautiful works of art, so immortal is its spirit breathed into us that it stirs like a living voice although the busy brain and hand that fashioned them have long been dust. The poet may describe in glowing words the peasant life of France, but what he accomplishes by fifty pages—Millet does with a flash. You may look at Raphael's St. Cecilia with closed ears, but you still hear its heavenly music. Divert your gaze upon the Madonnas, and you are transported to another world, and breathe the atmosphere of the celestial beings. So great is the influence of the good and beautiful that you cannot look upon the two pious figures in the "Angelus" unless you find yourself thinking as seriously and fervently as they.

If these are the emotions produced by looking upon the works of other men, how much greater will be the result by seeing nature with our own eyes, instead of the eyes of the old masters, and painting it with our own hands. Art opens the mind to a study and love of nature and a love of nature begets a love for its Creator, it is a means of refinement, an ennobler of character, it refreshes our

spirits, informs our tastes, and pours beauty into our very existence. These reasons alone should give it place among the factors that educate the world, for an education it truly is, and your character is not complete without it. Why must the Sphinx still be the greatest monument in the world, and why must Raphael's Sistine Madonna still be the most wonderful picture ever produced, and why do the old marble and canvas glow with a depth of color and eloquence that modern times cannot produce? These facts show that the arts have been slighted and shoved aside to give greater room for more Latin and more Greek and more of the less practical things.

Industrial training demands that male and female education be placed side by side, just as God intended it. He put the two sexes beside each other in Eden. He places them beside each other in the family and why not in the schools? No land will be what it ought to be, until woman is given opportunity for thorough and practical education with man. If woman is to be barred from the trades and professions, let her be trained, at least, in that one great art, which she alone can perform, she alone can idealize and perfect—domestic science. True it is that when the expert dressmaker or scientific cook is wanted, demand is sometimes made upon a man, and minority may even excel woman, but to make an artistic garment or to prepare a palatable meal is not one-half of domestic science. It means a knowledge of all kinds of household duties, economical purchase of family supplies, and general household management, and above all, it means the art of homemaking and man can never occupy the chair of this sacred profession. By training in domestic science, one is aroused in the hope of being raised from the lower mission of housekeeping to the higher mission of homemaking; from the lower mission of providing bodily comfort to the higher mission of providing heart-comfort. Woman, if she wishes to influ-

ence or rule must labor as the man, and when to be a laborer demands to be less than a woman, it is time to cry halt and prepare for defense for an enemy of childhood advances.

History has told the story of the crown, epic poetry has sung of the sword, the pastoral poet has sung the praises of the plow, and domestic science sings the praises of the needle. Skill to wield this small but powerful weapon makes a pleasure out of an occupation that once was drudgery and gives the assurance that all may become artists in their daily work. Teach your fingers cleverness with the needle and you get results which are amazing, you get thrift, a cunning hand, uprightness of soul and you will find that when you complete a garment by sewing scientifically, you have not only added to your bodily comfort but you have added to your character. The purpose of this training, is to show that it is impossible to hide the results of error and carelessness, that it is noble to despise sham and idleness, and that it is imperative to acquire patience and perseverance. By the acquaintance of this art, the needle that for ages has punctured the eyes, pierced the sides, and made terrible massacre transforms itself from the oppressor to the cheerful slave. Stitch! Stitch! Thomas Hood has set it to the music of poetry, let us train our fingers to work harmoniously to his accompaniment.

Cooking is another accomplishment of which no lady can afford to be ignorant, for it is one of the finest adornments that beautify woman, and those who are above going into a kitchen to learn this great art by actually working at it, would better migrate to another world where home, industry and husbands are unknown. In cooking, there is no such thing as good or bad luck there is only good or bad management. It demands accuracy, appliance of principles, and its chemistry is as precise as the chemistry of the laboratory. This phase of industrial training commands a scientific

knowledge of the nutritive value of foods, composition of simple substances, and a combination of food-stuffs that will secure the greatest strength and growth of body and brain. It demands recognition not only for its usefulness and practical value but also as an educational factor. A kitchen reflects the character of its occupant and what she cooks will tell you what her health and the health of those dependent upon her will be and how she cooks will tell you whether her knowledge of it is scientific, or whether it consists of nothing more than cook-book lore. It is bad cooking and unpalatable food that make the Americans the greatest dyspeptics on earth. Teach scientific cooking, the "whys" of its principles, and the sluggish minds, morbid dispositions and wrecks of humanity will gradually decrease.

The age of ornamental learning is passing away, the age of science and art has come, the age of industrial and practical development has begun. Educate woman in the practical things of life, place the two sexes on an equal footing, and you have a force more powerful than trained regiments. With their trained eyes, they will see into the future and foretell its needs, with their well equipped minds devise and invent for the next generation, and with their skilled hands imprint their ideas upon matter, thus preserving them forever. This well-drilled army of workers will ever press onward and scale the highest peaks of learning until the mount "Excelsimus" is reached, then man will look backward and see how he has molded raw material into living things, and in his crown of excellence will be emblazoned these words, "Behold what my hand hath wrought," and industrial training will point to the ships that sail the sea, to the machinery that harnesses the torrents, to the bridges that span the streams, to the statutes that breathe forth life, to the homes that insure happiness, and say, "Behold my handiwork."